



PATENT  
678503-2006.2  
USSN 09/612,852

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s) : Krasnykh and Curiel  
Serial No. : 09/612,852  
For : MODIFIED ADENOVIRUS CONTAINING A FIBER  
REPLACEMENT PROTEIN  
Filed : July 10, 2000  
Examiner : Whiteman, Brian A.  
Art Unit : 1635

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**INFORMATION DISCLOSURE STATEMENT**

Mail Stop RCE  
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Dear Sir:

The Examiner's attention is respectfully drawn to the enclosed documents listed on the accompanying PTO Form 1449. A copy of the documents with an asterisk was previously submitted to or cited by the USPTO in predecessor application Serial No. 09/250,580, filed

February 16, 1999 (now U.S. Patent No. 6,210,946). Accordingly, no copy of those documents is submitted herewith.

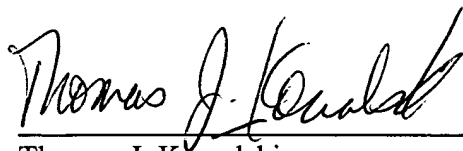
As these documents present no new issues to patentability, it is respectfully requested that the Examiner considers and makes of record the documents cited herewith and that a copy of Form PTO-1449 be initialed by the Examiner and returned to the undersigned.

The filing of this Information Disclosure Statement is not an admission that the documents identified herein constitute prior art to the present application.

As this report is being filed with a Request for Continued Examination, it is believed no fee is required. However, the Examiner is authorized to charge any additional fees, or credit any overpayments, to Deposit Account No. 50-0320.

Respectfully submitted,  
FROMMER LAWRENCE & HAUG LLP

By:

  
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Encs. PTO Form 1449  
References (20)

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(3/90)

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## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

Curiel et al.

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	*5,770,442	06/23/98	Wickham et al.			
	AB	*5,846,782	12/08/98	Wickham et al.			
	AC	*5,877,011	03/02/99	Armentano et al.			
	AD	*5,885,808	03/23/99	Spooner et al.			
	AE	*6,057,155	05/02/00	Wickham et al.			
	AF						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AG							
	AH							
	AI							

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AJ		*Gall et al., "Adenovirus Type 5 and 7 Capsid Chimera: Fiber Replacement Alters Receptor Tropism Without Affecting Primary Immune Neutralization Epitopes," <i>J. Virol.</i> , 70(4): 2116-2123, 1996					
	AK		Bergelson, J. et al., "Isolation of a Common Receptor for Coxsackie B Viruses and Adenoviruses 2 and 5," <i>Science</i> , 275: 1320-23, 1997					
	AL		Tomko, R. et al., "HCAR and MCAR: The human and mouse cellular receptors for subgroup C adenoviruses and group B coxsackieviruses," <i>Proc. Natl. Acad. Sci.</i> , 94: 3352-56, 1997					
	AM		Krasnykh, V. et al., "Genetic Targeting of Adenoviral Vectors," <i>Molecular Therapy</i> , 1: 391-405, 2000					
	AN		Wickham, T. et al., "Adenovirus targeted to heparan-containing receptors increases its gene delivery efficiency to multiple cell types," <i>Nat. Biotechnol.</i> , 14: 1570-73, 1996					
	AO		Dmitriev, I. et al., "An Adenovirus Vector with Genetically Modified Fibers Demonstrates Expanded Tropism via Utilization of a Coxsackievirus and Adenovirus Receptor-Independent Cell Entry Mechanism," <i>J. Virol.</i> , 72: 9706-13, 1998					
	AP		Vanderkwaak, T. et al., "An Advanced Generation of Adenoviral Vectors Selectively Enhances Gene Transfer for Ovarian Cancer Gene Therapy Approaches," <i>Gynec. Oncol.</i> , 74: 227-34, 1999					
	AQ		Kasono, K. et al., "Selective Gene Delivery to Head and Neck Cancer Cells via an Integrin Targeted Adenoviral Vector," <i>Clinical Cancer Research</i> , 5: 2571-79, 1999					
	AR		Hong, J. et al., "Domains Required for Assembly of Adenovirus Type 2 Fiber Trimers," <i>J. Virol.</i> , 70: 7071-78, 1996					
	AS		Tao, Y. et al., "Structure of bacteriophage T4 fibrin: a segmented coiled coil and the role of the C-terminal domain," <i>Structure</i> , 5: 789-98, 1997					

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AT			RECEIVED			
	AU			MAR 19 2004			
	AV			OFFICE OF PETITIONS			
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## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AX							
	AY							

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AZ		Letarov, A. et al., "The Carboxy-Terminal Domain Initiates Trimerization of Bacteriophage T4 Fibrin," <i>Biochemistry(Moscow)</i> , 64: 817-23, 1999
	BA		Douglas, J. et al., "A system for the propagation of adenoviral vectors with genetically modified receptor specificities," <i>Nat. Biotechnol.</i> , 17: 470-75, 1999
	BB		Krasnykh, V. et al., "Characterization of an Adenovirus Vector Containing a Heterologous Peptide Epitope in the HI Loop of the Fiber Knob," <i>J. Virol.</i> , 72: 1844-52, 1998
	BC		Von Seggern, D. et al., "Complementation of a fibre mutant adenovirus by packaging cell lines stably expressing the adenovirus type 5 fibre protein," <i>J. Gen. Virol.</i> , 79: 1461-68, 1998
	BD		Legrand, V. et al., "Fiberless Recombinant Adenoviruses: Virus Maturation and Infectivity in the Absence of Fiber," <i>J. Virol.</i> , 73: 907-19, 1999
	BE		Davison, E. et al., "The Human HLA-A *0201 Allele, Expressed in Hamster Cells, Is Not a High-Affinity Receptor for Adenovirus Type 5 Fiber," <i>J. Virol.</i> , 73: 4513-17, 1999
	BF		Lindner, P. et al., "Specific Detection of His-Tagged Proteins with Recombinant Anti-His Tag scFv-Phosphatase or scFv-Phage Fusions," <i>BioTechniques</i> , 22: 140-49, 1997
	BG		Miroshnikov, K. et al., "Engineering trimeric fibrous proteins based on bacteriophage T4 adhesins," <i>Protein Eng.</i> , 11: 329-32, 1998
	BH		Efimov, V. et al., "Bacteriophage T4 as a Surface Display Vector," <i>Virus Genes</i> , 10: 173-77, 1995
	BI		Gahery-Segard, H. et al., "Immune Response to Recombinant Capsid Proteins of Adenovirus in Humans: Antifiber and Anti-Penton Base Antibodies Have a Synergistic Effect on Neutralizing Activity," <i>J. Virol.</i> , 72: 2388-97, 1998
	BJ		Krasnykh, V. et al., "Generation of Recombinant Adenovirus Vectors with Modified Fibers for Altering Viral Tropism," <i>J. Virol.</i> , 70: 6839-46, 1996
	BK		
	BL		
	BM		

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DATE CONSIDERED

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